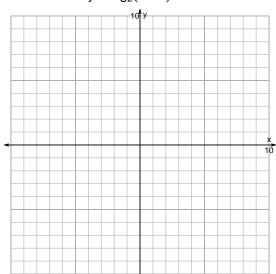
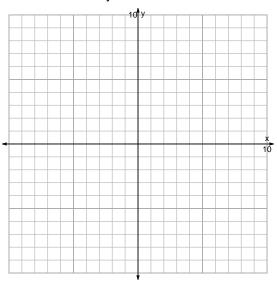
s18quiz: EXP LOG (QUIZ v232)

1. Graph $y = \log_2(x-6) + 3$ and $y = 2^{x+6} - 5$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x-6) + 3$$



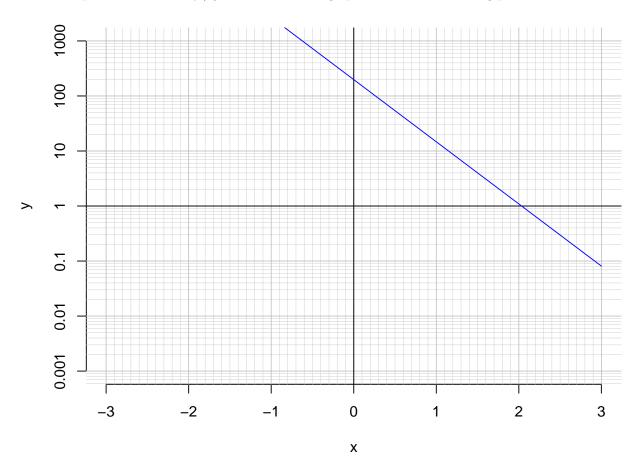
$$y = 2^{x+6} - 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-11 = \left(\frac{-3}{5}\right) \cdot 10^{-7t/4}$$

3. An exponential function $f(x) = 198 \cdot e^{-2.6x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.3).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(70)$.